

## THE UNDER SECRETARY OF DEFENSE

## 3010 DEFENSE PENTAGON WASHINGTON, DC 20301-3010

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## MEMORANDUM FOR CHAIRMAN, DEFENSE SCIENCE BOARD

SUBJECT: Terms of Reference – Defense Science Board Ad Hoc Committee on Energy Systems for Forward/Remote Operating Bases

Operations at forward/remote operating bases require a significant amount of energy. By its nature, a forward, remote operating base lacks the surrounding infrastructure to easily transport the large quantities of energy required to support operations. Therefore, supplying energy at forward, remote operating bases incurs significant costs (e.g. personnel, monetary, force structure, etc.) and risks (e.g. security, scarcity, etc.) at both the endpoint as well as the logistical operations used to supply the energy.

The study should assess the different mechanisms to provide energy to forward, remote operating bases. In addition, the assessment should identify the relevant factors (e.g. survivability, sustainability of logistics services, force protection requirements, etc.) of the energy sources. At a minimum the study should address these factors in a qualitative manner. Whenever possible, the study should provide quantitative analysis.

The study is not constrained to address any one mechanism to support the energy needs of a forward operating base. However, to address Senate Armed Services Committee National Defense Authorization Act for Fiscal Year 2014 language, it should examine the feasibility of deployable, cost-effective, regulated, and secure small modular reactors with a modest output electrical power (less than 10 megawatts) to improve combat capability and improve deployed conditions for the Department of Defense (DoD). The study must address: technical feasibility, policy oversight and regulation, robust safety and secure design features, logistics and resources, proliferation concerns, life-cycle costs, deployment policies and transportability, personnel costs, and lessons learned from recent combat operations.

I will sponsor the study. General Paul Kern, USA (retired) and Dr. Michael Anastasio will serve as Co-chairmen of the Task Force. Dr. Bret Strogen, from the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, will serve as Executive Secretary, and Lt Col Michael Harvey will serve as the Defense Science Board Secretariat Representative.

The study will operate in accordance with the provisions of P.L. 92-463, the "Federal Advisory Committee Act," and DoD Directive 5105.04, the "DoD Federal Advisory Committee Management Program." It is not anticipated that this study will need to go into any "particular matters" within the meaning of title 18, U.S.C., section 208, nor will it cause any member to be placed in the position of action as a procurement official.

Frank Kendall